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## Model Lesson Plan Science Grade Kindergarten

### Fortune Teller Fish

#### Stage 1 – Desired Results

##### Standards:

**Science S1** Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate the results and form reasonable conclusions of scientific investigations.

##### Understandings (Benchmarks):

Students will...

- Develop the abilities necessary to safely conduct scientific inquiry, including (a step-by-step sequence is not implied): (a) asking questions about objects, events, and organisms in the environment, (b) planning and conducting simple investigations

##### Essential Questions:

- What is an observation?
- What is a testable question?
- How can questions be tested?
- How are observations communicated?

*Students will know...*

- Observation and questions guide investigations
- Investigations can answer questions

*Students will be able to...*

- Communicate observations
- State questions, and with guidance state a testable question
- Conduct a simple investigation with guidance

#### Stage 2 – Assessment Evidence

##### Performance Tasks:

Students will observe and generate questions about fortune teller fish. Students will record and orally share observations. The student-generated questions will guide the development of a simple investigation into the cause of the fish's movement. Students will conduct a simple investigation and share results.

##### Other Evidence:

- Participate- Share observations about fortune teller fish.
- Contribute- At least one reason why fish moves.

### Stage 3 – Learning Plan

#### Learning Activities:

1. Begin by assembling students in a circle on the floor. Discuss with students the guidelines of group discussion (raising your hand, one person speaks at a time, etc).
2. To set the stage, make sure students understand what a question is.
3. Ask students entry questions: Have you ever seen a fish? Do you know what a fortune teller is? Have you every seen a fortune teller fish?
4. Discuss how they will be using questions to learn more about a fortune teller fish.
5. Provide each student with a fortune teller fish. Allow time for the students to explore what this fish does.
6. Have students draw their fish on a piece of paper with as much detail as possible.
7. Introduce students to the term observation. Have students share their drawings and see who made similar observations. Explain that by making a drawing of their fish they are recording observations.
8. Guide students to take turns asking the fish a question. The questions can be anything, EXCEPT -what is my fortune? Record student questions for all to see.
9. Allow all students the opportunity to generate a question, or continue until someone asks their fish– "How do you work? or How do you move?"
10. Discuss that some questions can be tested and what that means. Ask the students to determine which questions can be tested. This may take guidance.
11. Circle any questions that can be tested. Discuss the features of those questions. (Usually start with: how, does, which, can, what if)
12. Guide the students to focus on the question of how the fish works.
13. Direct students to provide reasons why the fish may move and list these reasons on the board.
14. Provide examples of how these reasons can be developed into questions. Write these on the board.
15. Lead the class to test the reason of moisture.
16. Put students into pairs and have them draw how they would expose their fish to moisture. Have the students share these with the class.
17. Discuss the different ways the fish can be exposed to moisture.
18. Provide students with the opportunity to carry out their plan. Students should draw their fish after their investigation.
19. Students share the results of their investigation with the class.
20. Guide discussion of why the fish moves in the students' hands and how water affects the fish.
21. Class decides on a common conclusion as to why the fish moves.
22. Discuss the process of what the students did and how this relates to science. Share with the students that this process will be used as they learn more about science.

#### Materials/Resources Needed:

- Fortune teller fish
- Blank paper
- Crayons or colored pencils
- Whiteboard
- Investigation materials will be guided by students plans, but usually include water, bowls, paper towels.